# HP StorageWorks

X1000 G2 Network Storage System Windows Storage Server 2008 R2 Standard to Enterprise Edition Upgrade DVD SWXU version 2.00.4a

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### Overview

When you upgrade your X1000G2, you will change the operating system from WSS2008 R2 Standard Edition to WSS2008 R2 Enterprise Edition. After the upgrade is complete, your system will be similar to an X3000 series Network Storage System. Additionally, after the upgrade, Automated Storage Manager (ASM) will no longer be installed on your system and is not supported on the upgraded system.

# System Upgrade DVD version SWXU 2.00.4a

This document provides instructions for upgrading your HP StorageWorks X1000 G2 Network Storage System from the Microsoft Windows Storage Server 2008 R2 Standard Edition operating system to the Microsoft Windows Storage Server 2008 R2 Enterprise Edition operating system.<sup>1</sup>

The following storage system models support the upgrade to Microsoft Windows Storage Server 2008 R2 Enterprise Edition:

- HP StorageWorks X1400 G2 Network Storage System
- HP StorageWorks X1500 G2 Network Storage System
- HP StorageWorks X1600 G2 Network Storage System
- HP StorageWorks X1800 G2 Network Storage System
- HP StorageWorks X1800sb G2 Network Storage Blade

# Before you begin

Installing this upgrade results in the original operating system logical disk being completely overwritten and replaced with a clean installation of the Microsoft Windows Storage Server 2008 R2 operating system. **All data on this disk will be erased.** Before beginning the upgrade process, be sure to back up any data that you would like to restore after the upgrade is complete.

The upgrade process does not overwrite any data that resides on non-OS data volumes; however, HP strongly recommends that you also back up data on these disks in the unlikely event of an unintended data loss.

#### (!) IMPORTANT:

Data volumes will be available after the restore process; however, you will need to restore their drive letters. For more information, see "Restoring data volume drive letters" on page 4.

After the upgrade process is complete, the Upgrade DVD should also be used as the System Recovery disk. Subsequent uses of the Upgrade DVD will restore the storage system to its default Enterprise OS volume settings.

<sup>&</sup>lt;sup>1</sup> Microsoft®, Windows®, Windows® XP, and Windows NT® are U.S. registered trademarks of Microsoft Corporation.

#### (!) IMPORTANT:

The System Recovery Disk that was originally provided with your HP StorageWorks X1000 G2 Storage System installs the original operating system (Microsoft Windows Storage Server 2008 R2 Standard Edition). After completing this upgrade, be sure to use the Upgrade DVD to perform system recoveries on the upgraded system.

Following the upgrade process, a 100 MB boot partition exists. This volume contains boot information and supports BitLocker drive encryption. This is a **DO NOT DELETE** drive and is hidden from view in the operating system.

# Recording current system settings

Before performing the upgrade, HP recommends that you locate and record information about your system. The following table describes how to find some basic settings for your system. You may also want to save additional system information.

Setting	Location
Computer name and description	Select <b>Start</b> , right-click on <b>My Computer</b> , and select <b>Properties</b>
Time zone	Click the clock in the taskbar and then click Change date and time settings
Network settings	Run <b>Server Manager</b> (found in the quick launch bar) from the top "Server Manager" node, and then select <b>View Network Connections</b>
Domain settings	Click <b>Start</b> , right-click on <b>My Computer</b> , and select <b>Properties</b>
Mount points for local disks	Run <b>Server Manager</b> (found in the quick launch bar), select <b>Storage</b> , and then select <b>Disk Management</b>
Mapped drives (CI-FS, NFS)	Right-click <b>Start</b> and select <b>Explore</b>
iSCSI configuration	Run <b>Server Manager</b> (found in the quick launch bar), select <b>Storage</b> , and then select <b>Microsoft</b> iSCSI Software Target
IIS configuration (FTP, HTTP, Web- DAV)	Click Start, select Administrative Tools, and then select Internet Information Services (IIS) Manager
Local users	Run <b>Server Manager</b> (found in the quick launch bar)
List of installed pplications	Click <b>Start</b> , select <b>Control Panel</b> , and then select <b>Programs and Features</b>
Single Instance Storage (SIS) on volumes	At a command prompt, run sisadmin /v

# Upgrading your storage system to Windows Storage Server 2008 R2 Enterprise Edition

The upgrade can be completed by using either the direct connect access method or the remote management access method. As an alternative to using the provided upgrade DVD, you can create and use a USB flash drive to upgrade your storage system. For instructions on creating a USB flash drive, see "Create a System Recovery USB Flash Drive" on page 3.

#### (!) IMPORTANT:

If your C:\ volume has been renamed with a non-compliant label (that is, any label other than **System** or **OS**), the system upgrade will fail. Before running the System Upgrade DVD, ensure that the C:\ volume is properly labeled; if it is not, rename the volume to either **System** or **OS**.

#### 1. Do one of the following:

- a. To use the direct connect access method, connect a keyboard, monitor, mouse, and DVD drive (if needed) directly to the storage system using a local I/O cable.
- **b.** To use the remote management access method, access the server using Integrated Lights-Out from a client PC.

#### NOTE:

For more information about using virtual media, see the iLO documentation.

#### 2. Do one of the following:

- a. For direct connect, insert the Upgrade DVD into the DVD drive or insert the USB Flash Drive into a USB port.
- b. For remote management, insert the Upgrade DVD into the DVD drive on the client PC or insert the USB Flash Drive into a USB port on the client PC.

#### 3. Click Restore Factory Image.

The upgrade process completes with little user intervention required. The server automatically reboots more than once.

#### (!) IMPORTANT:

Do not interrupt the upgrade process.

When the upgrade process nears completion, the Windows Storage Server 2008 R2 Enterprise desktop displays the **Set Up Windows** wizard.

- On the first page of the wizard, select a language from the list and then click Next.
- On the next page of the wizard, select the country or region, time and currency, and keyboard layout settings, and then click Next.

On the next page of the wizard, enter the Windows product key, which is located on the Certificate of Authenticity label provided with the upgrade DVD, and then click **Next**.



#### NOTE:

By default, Windows will attempt to activate your copy of the operating system three days after initially logging in to the system. To disable this setting and instead activate Windows manually, clear the Automatically activate Windows when I'm online check box. For more information about manual activation, see "Activate Windows manually" on page 3.

On the next page of the wizard, review the license terms, check the I accept the license terms check box, and then click Start.

The Windows Storage Server 2008 R2 Enterprise desktop displays the following message: The user's password must be changed before **logging on the first time**. Log on to the storage system by establishing an Administrator password:

- Click **OK**.
- Type an Administrator password in the **New password** box.
- Re-type the Administrator password in the Confirm password
- Click the blue arrow next to the **Confirm password** box.
- Click OK.

After the Administrator password has been set, the storage system completes the upgrade process.

Remove the DVD, USB flash drive, iLO virtual DVD, or iLO virtual USB flash drive.

#### (!) IMPORTANT:

After the upgrade process is complete, you must physically affix the included Certificate of Authenticity (COA) for the upgraded Windows Storage Server 2008 R2 operating system to the storage system. Failing to do so is a violation of the Microsoft Windows Storage Server 2008 R2 licensing terms and conditions.

# Creating a System Recovery USB flash drive

This procedure is supported on Windows Vista, Windows 7, Windows Storage Server 2008, and Windows Storage Server 2008 R2 operating systems only.

If you create a backup copy of the upgrade DVD using a USB flash drive, it can also be used to restore the system. To create system recovery media using a USB flash drive, complete the following steps:

- Obtain a blank 8GB or larger USB flash drive.
- 2. Insert the USB flash drive into your workstation or laptop.
- Open an elevated command prompt with Administrator privileges.
- At the command prompt, enter diskpart.

- At the diskpart prompt, enter list disk.
- Identify the disk number that corresponds to the flash drive. This is typically the last disk listed.
- Enter select disk <USB drive number>. For example, select disk 4.
- Enter clean.
- Enter create partition primary.
- 10. Enter select partition 1.
- 11. Enter format fs=fat32 quick.



#### NOTE:

If your USB flash drive does not support the FAT32 file system, format the drive as NTFS instead. Omitting the quick parameter lengthens the format time considerably.

- 12. Enter active to mark the partition as active.
- 13. Enter assign letter=<drive letter> to assign a drive letter to the USB drive. For example, assign letter=U.
- 14. Insert the System Recovery DVD provided with the system.
- 15. Using Windows Explorer or a comparable utility, open the DVD so that all contents are visible.
- 16. Select all of the files (including bootmgr).
- 17. Copy all files to the root of the USB drive.

# Activating Windows manually

If you did not select the automatic Windows activation option during the upgrade process, you must manually activate your copy of Microsoft Windows Storage Server 2008 R2 Enterprise Edition within 30 days of initially logging into the system.

If needed, change your locale settings (Control Panel > Regional and Language Options).



#### NOTE:

If you did not enter your Product Key located on the Certificate of Authenticity during the quick-restore process, you will need to enter that key during the next steps.

- In Control Panel, double-click **System**.
- Under Windows Activation, click Activate Windows Now.
- Follow the on-screen instructions.

If you have an external Internet connection, Microsoft Windows Storage Server 2008 R2 Enterprise Edition can be activated online. If there is a problem with Windows Activation, the on-screen instructions will instruct you to call Microsoft. Be sure to have the product key available when calling this number.

# Restoring data volume drive letters

When you use the Standard to Enterprise Upgrade DVD to restore a system that has existing data volumes (non-operating system volumes), drive letters are not assigned to the data volumes. This is by design. The volume labels are retained and can be used to identify the data volumes.

To assign drive letters to volumes, use either diskpart.exe or Disk Management. To open Disk Management, click **Start** > **Run...**, enter **diskmgmt.msc**, and then click **OK**. Right-click the disk and partition to be assigned a drive letter and select **Change Driver Letter and Paths**. Follow the on-screen instructions to add a drive letter to the volume.